

opentext.ai

The internet changed
everything... with AI:
everything must change

CEO Position Paper

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1. Introduction

Platform *shift happens*. And it is happening again.

Exponential growth in technology has spurred surprising and sudden change. We have reached a critical mass in global connectivity, with over five billion people connected to an internet of clouds.¹ Computing power is extremely available and extremely cost effective. Large data sets have emerged as a result. We are seeing a flood of new algorithms, new models and new products.

With extreme computing power, extreme networking, large data sets, and the emergence of new models, like large language models, AI is becoming mainstream. I once wrote that the “internet changes everything.”² Today, **with AI, everything must change.**

AI is not just another technology or business case. It will shape the future, what it means to be a company and what it means to be human. R&D and software engineering will be transformed through AI. Support will be transformed through AI. Marketing, sales, customer ops, supply chain, corporate IT, risk and compliance, all transformed.

Although interacting with AI may seem simple from the user’s perspective, it involves many sophisticated technologies working together behind the scenes—big data, natural language processing (NLP), machine learning (ML) and more. Integrating this componentry—ethically and effectively—requires expertise, strategy and insight.

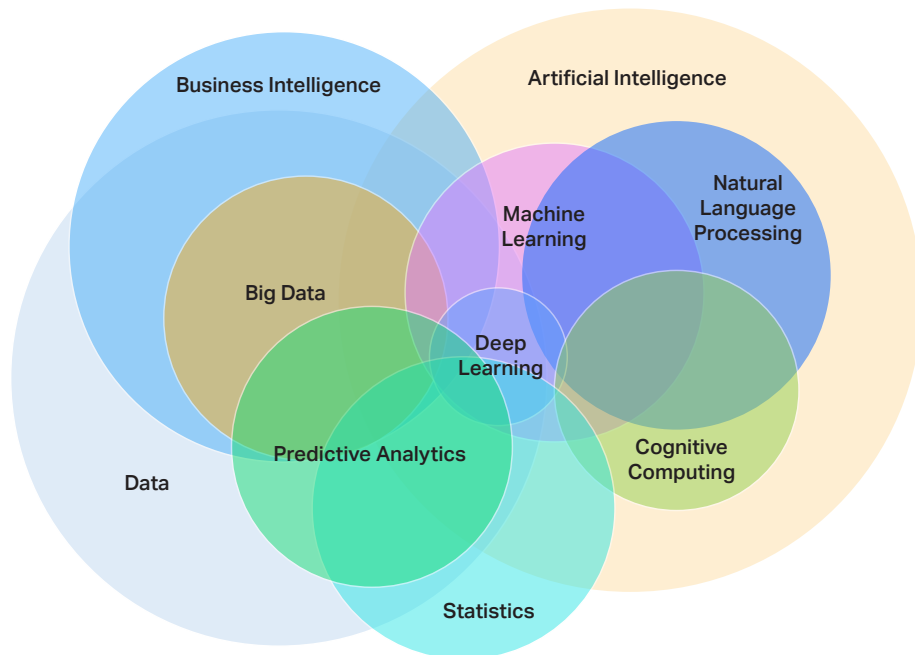


Figure 1:

Unpacking AI

At OpenText, we intend to be a trusted partner on our customers’ AI journey. To guide organizations to reap AI’s benefits and avoid its risks. To help them manage information and elevate their business with AI-based solutions across every function.

To paraphrase Bob Dylan, “the times they are (AI) changin’.” It is time for all organizations, in every industry, to change as well.

2. The Cognitive Era—A New Era of Computing

We are now beyond digital. It is the next era of computing—and opportunity.

Since the 1960s, computers have been able to process information according to predefined rules. Our computing systems have done an amazing job of processing information, programming business rules and automating processes to improve communications, productivity and efficiency.

But cognitive systems take computing to a new stratosphere—one we are only beginning to scratch the surface of. Cognitive systems are defined by their ability to “think.” They can learn, reason and act based on proficiency and experience, as opposed to following rules that have been programmed. This is what sets cognitive computing apart.

And as we are now seeing with the rapid explosion of new AI abilities, it’s time for cognitive systems to free us from the limited, rigid scope of machines in the Calculation and Automation Eras.

The Next Era of Computing and Opportunity

- Information and cognitive driven
- Seamless shifts between physical & digital (Phygital)
- A level: automation, algorithms, applications, augmented reality
- More human: workforce is fluid and global
- Always on, fully connected, instant

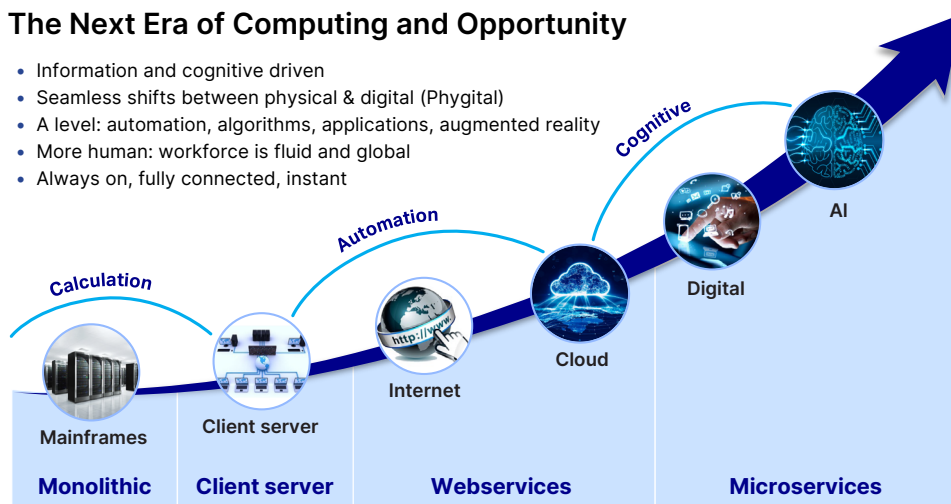


Figure 2:

The next era of computing and opportunity

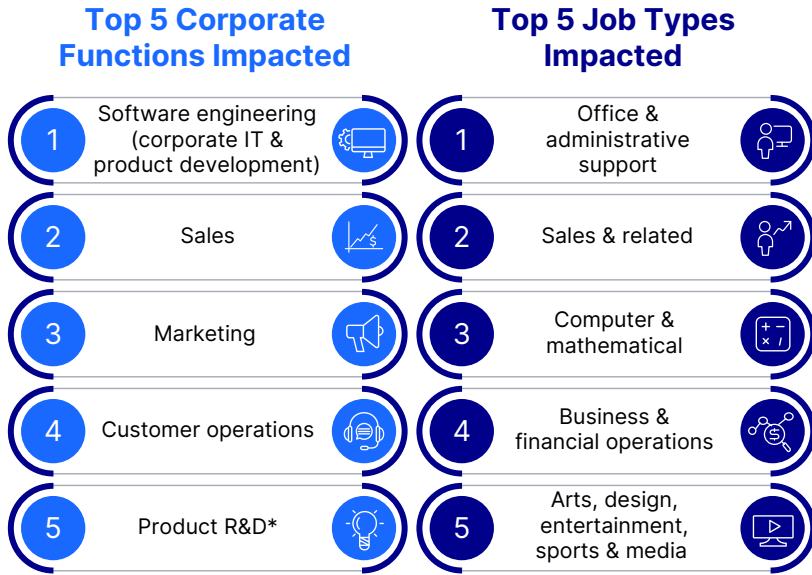
Cognitive computing is modeled after the most powerful computing system in the world: the human brain and its neural networks. And like us, it gets smarter over time as it builds up a domain of knowledge based on its “experience.”

Cognitive systems transform data into smart data. Their thought processes are non-linear and they can process massive amounts of information, often faster than the human brain. As structured, unstructured and big data continue to accumulate in huge quantities, cognitive systems will unlock the value buried in these massive data sets.

We are at the cusp of the whirlwind new future of AI. This technology, with its ability to skyrocket our capabilities, will be the defining factor that separates top performing organizations from those doomed to fizzle out. As AI implementations increase in size and scope, forward-thinking companies will consistently leverage it to solve their greatest challenges.

The impact of cognitive technologies on business will grow significantly in the immediate future. Consider just one aspect of cognitive technology, generative AI. McKinsey calls generative AI “the next productivity frontier,” which could add trillions in value to the global economy.³ Nearly every function in corporations is going to radically change. And in fact, the nature of work itself will be transformed.

A Snapshot of Generative AI’s Impact



*Excluding software engineering

Figure 3:

Generative AI will transform work in every industry^{4 5}

In addition to these areas that will be most impacted by AI, there are two more key areas: document search and user interfaces. GenAI will allow users to interact with content in new ways—to ask questions of documents. The UI will be conversational, but transactional.

The business impact is so wide: how we sell, how we do marketing, how we write code, how we make supply changes, how we build IT systems, and much more.

The Cognitive Era is introducing another mass inflection and exponential change in the rate of our development. As businesses, as leaders and as humans, we must learn again. We must go beyond, into this next incredible era of computing.

The choice to embrace AI is straightforward; the journey is not.

Welcome to the Cognitive Era.

3. Announcing opentext.ai

Now is not the time to slow down innovation. The right technologies, leveraged effectively and ethically, can spur phenomenal growth.

At OpenText, we are unlocking the potential of artificial intelligence and large language models (LLMs) for our customers. Our new approach and vision is called **opentext.ai**. It is about delivering the best solutions across all types of AI—complex knowledge processing, robotics, learning, language processing, generative AI and quantum. We believe AI has a phenomenal power for information management, and with **Titanium X**, our technology roadmap, we intend to embed AI across our major products and services.

OpenText Aviator

As part of this commitment, we are excited to introduce **OpenText Aviator**, which will integrate astounding AI capabilities into each of our clouds.



Introducing OpenText Aviator

OpenText Content Aviator	Embrace a new way to interact with content and extract knowledge
OpenText Business Network Aviator	Revolutionize the internet of clouds via connectivity
OpenText IT Operations Aviator	Redefine all Level 1 business support (IT, HR, Sales)
OpenText DevOps Aviator	Elevate 30 million developers
OpenText Cybersecurity Aviator	Respond to threats in real time and ensure data is private and secure
OpenText Experience Aviator	Transform customer communications

Figure 4:

Introducing OpenText Aviator

Aviator will act as a force multiplier for the **information advantage**, enabling organizations to power and protect their information and elevate their business. Here are just some of the capabilities our customers can achieve through Aviator:

- **Content:** Bring AI to content users and producers to embrace the next era of interacting with content, unleash stored knowledge, manage structured and unstructured data at scale, automate workspace configuration, and leverage conversational search to quickly find related or similar content.
- **Business Network:** Revolutionize business via connectivity, identify anomalies and patterns in customer data, analyze and report the status of business transactions, and support intelligent decision-making.
- **IT Operations:** Leverage automation and AI across the full IT operations value chain, redefine Level 1 business support across IT, HR and Sales, and discover intelligent automation using generative AI.
- **DevOps:** Elevate developers around the world, enhance all aspects of service delivery and get actionable insights into digital value stream KPIs.

- **Cybersecurity:** Gain contextual threat intelligence, AI-powered APIs and the capability to understand and react to threats in real time; secure the benefits of AI with peace of mind that data is secure and accessible only to those who are approved.
- **Experience:** Transform customer communications and elevate digital experiences through advanced LLM and generative AI, predictive analytics and intelligent, personalized content creation.

OpenText Private Cloud Aviator

We are also announcing **OpenText Private Cloud Aviator**. For our private cloud customers, we will deliver a new Professional Service to help set up a private LLM, using out-of-the-box Aviator features or customers’ own private cloud environment for their information. OpenText can help customers advance using the data layers they operate in, matching those up with the right models, engineering the right way to extract that data and then operationalizing the entire process to drive transformative outcomes.

Private Cloud Aviator will empower organizations to experiment with AI and LLMs, all while their data is protected.

The Next Generation Managed Service

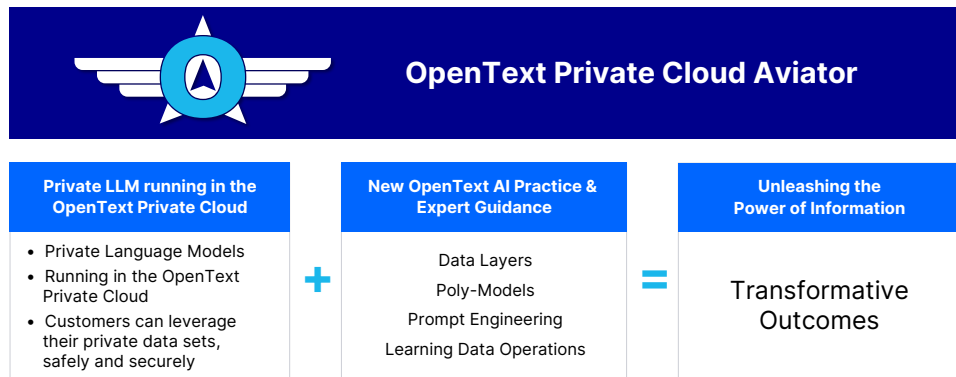


Figure 5:

OpenText Private Cloud Aviator

OpenText Aviator and OpenText Private Cloud Aviator will be available with Cloud Editions 23.4. We cannot wait to take our customers to new heights with all that Aviator can do.

4. Why OpenText

OpenText is a global market leader in information management. No other organization has the level of skills or experience in information management that OpenText offers. We are 24,000 experts strong, and we believe the OpenText Cloud is the most comprehensive information management platform on the planet.

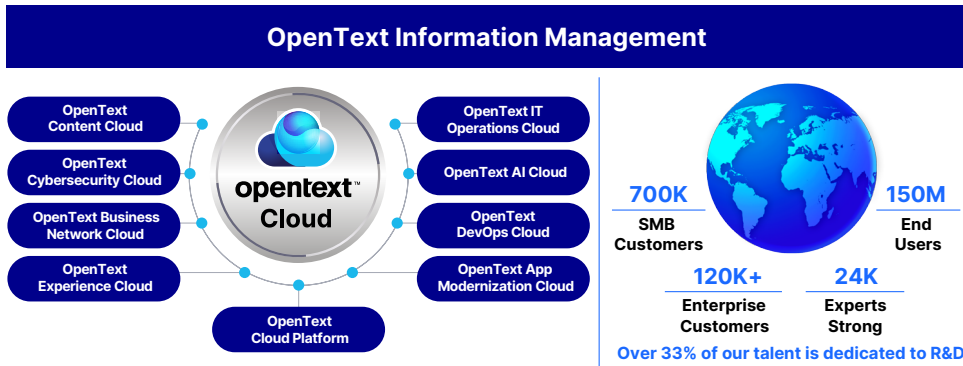


Figure 6:

Our leadership in Information Management

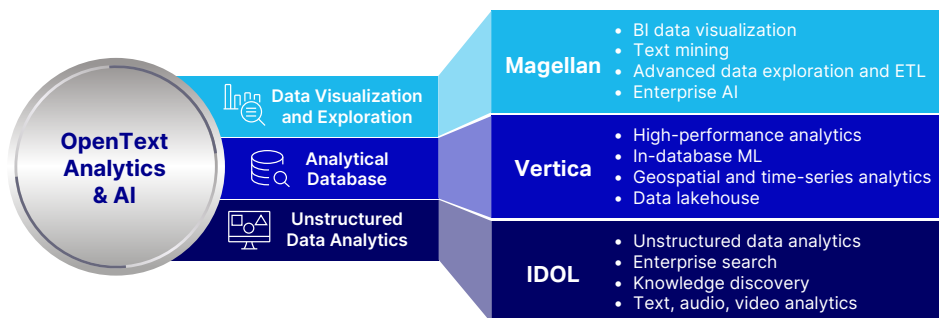
We have demonstrated for more than 30 years that we are deserving of our customers' trust. They have relied on us to help manage, enhance and increase the value of their data. Now, with the introduction of opentext.ai, organizations can gain even more insight into their information, and even more value from our services.

OpenText has a history of integrating aspects of AI into our solutions—metadata and text analysis in Extended ECM, business intelligence in Documentum and assisted authoring in Exstream, just to name a few of our extensive offerings. The history of **Magellan**, our flexible AI and analytics platform, goes back to 2010, and signaled our move towards a more open, scalable and affordable future for AI and cognitive computing.

With the acquisition of Micro Focus in January 2023, we have expanded our mission to include new AI capabilities with **Vertica** and **IDOL**, including geospatial and time-series analytics, in-database machine learning, unstructured data analytics and more.

Figure 7:

OpenText Magellan, Vertica and IDOL



We have layered in world-class cybersecurity solutions, large data sets and metadata tools, machine learning engines, Risk Guard and additional content analytics. And with **OpenText Aviator**, we are delivering the tools that will drive accelerated innovation cycles, forge new paths to growth, reduce costs and uplift skills within organizations.

Simply put, OpenText offers a full stack of AI-based solutions to help businesses gain insight, make better decisions and *work smarter*.

5. Understanding AI

AI is one of the most misunderstood concepts in the modern computer era. Today, almost all AI discussions start with generative AI, but AI and the opportunities it presents for organizations are much broader.

So, how do we deconstruct AI? At OpenText, we look at AI through the following taxonomy, and we intend to participate in each category:

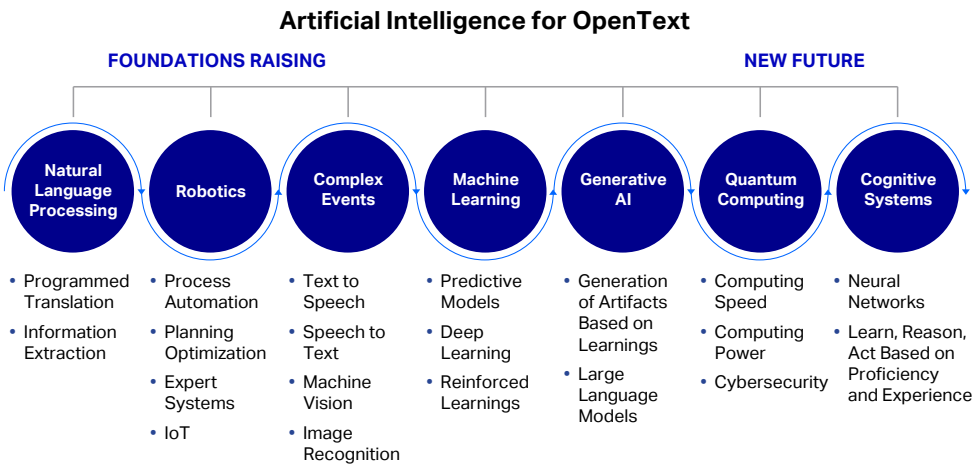


Figure 8:

Artificial intelligence for OpenText

Within GenAI, we see this taxonomy:

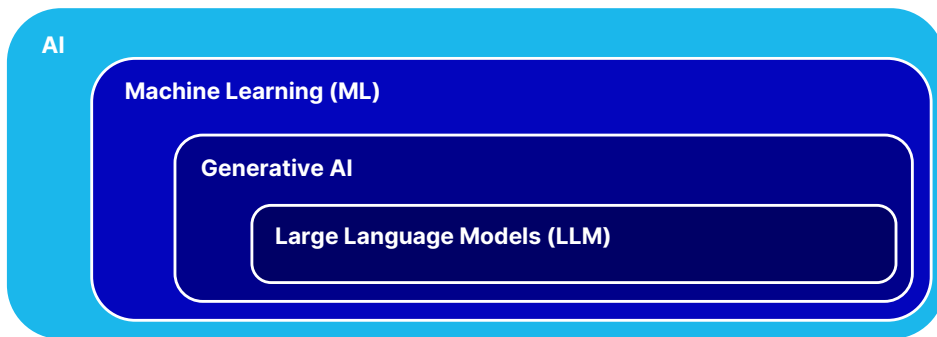


Figure 9:

A taxonomy of GenAI

LLMs can be seen as a pinnacle of AI development, but they are only one of many AI components. They are a subset of generative AI, which is itself a subset of machine learning. The right AI tool will vary according to application. For example, for optical character recognition (OCR), a standard trained ML is likely the most efficient solution. Generative AI algorithms *could* solve it, but would be way too computationally expensive.

To benefit from AI, you need a trusted partner who knows how to deploy its component technologies appropriately and effectively. At OpenText, we have a deep history of applying a wide range of AI technologies to solve problems and unleash knowledge from data.

AI & Data

AI *requires* data and models. The more data you can give it, the wider visibility it can provide into the business. But the old saying “garbage in, garbage out” is certainly true of AI algorithms, especially LLMs. At OpenText, information and data are at the center of our existence, and when it comes to AI, we think about three types of data:

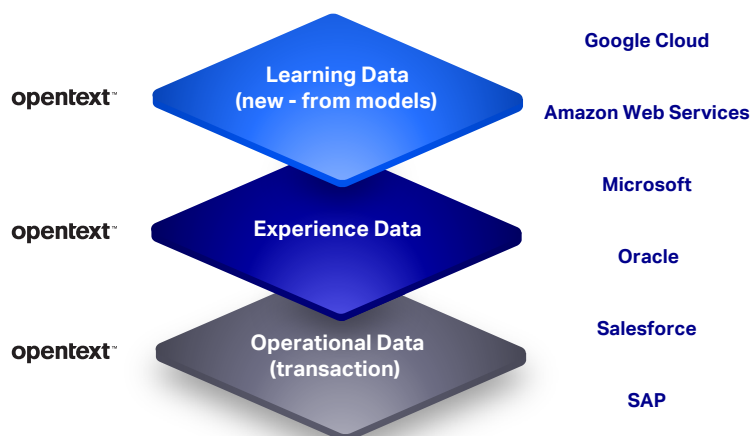


Figure 10:

Three types of data

- **Operational Data:** These are the transactional pieces—including ERP records and CRM data, such as payroll, supply chain, order entry, production data and development data. An effective AI solution will extract meaning and knowledge from this data. This data is real-time and typically not part of the training set of an LLM, as training LLMs takes months and a huge amount of computation.
- **Experience Data:** This is information that is exchanged with customers, including elements that affect the experience of the customer, such as Customer Support. Like Operations Data, Experience Data is real-time and not part of the training sets.
- **Learning Data:** This is data that represents the “state” of the AI algorithm. It represents everything that the algorithm has learned. For generative AI and LLMs, this includes the foundation models that the LLMs are trained on, but also the preprocessing, vectorization and indexing of the Operational and Experience Data that is used in an AI solution.¹

Learning Data is a new form of data, composed of what we learn from our models. But organizations may lack in-house LLM expertise and the right knowledge to get the most benefit from AI and build this Learning Data. OpenText can help customers advance through collecting data, organizing it, then applying AI to operate on the data and derive insight, all in a process that is ultimately lightweight and low cost. Just as companies previously set up Business Intelligence next to Operational Data, they can now set up Learning Data in the cloud next to their content systems, reaping the benefits of AI-driven knowledge, all while their data remains secure.

OpenText’s Poly-Model Approach

Within the areas of generative AI and LLM, there are numerous alternatives to OpenAI’s proprietary GPT algorithm. Many organizations are open-sourcing their algorithms and open-sourcing pretrained learning data. This allows businesses to build dedicated solutions that are efficient and optimized for a given problem.

¹ An additional type of data is Public Data from external sources, which is often used for LLM training.

At OpenText, our approach is poly-model. To best serve our customers through OpenText Aviator and other products, we need multiple planes in the hangar! We call it our *model squadron*. Just as we support multiple databases—Oracle, SQL, PostgreSQL—we will support multiple models—Vertex, PaLM2, T5, Open Assistant, GPT 4.0 and more. It's about deploying the right model for the right job, so our customers can thrive in the Cognitive Era.

Running AI for Our Customers

We envisage two scenarios for customers to leverage AI—multi-tenant and single tenant.

Multi-tenant

Multi-tenant involves having one service that can be used by multiple customers concurrently while retaining the controls and data privacy that organizations need and expect. Multi-tenant:

- Ensures our customers get the latest and greatest capabilities at the same time
- Reduces the complexity in the environment
- Internally reduces the burden on the run and maintain activities, as the footprint is on a single service (not an instance per customer)

Data that customers choose to securely provide to the LLM can be ingested and enhance the capabilities and interactions possible. These capabilities, responses and ingested data are only accessible to that customer.

Single tenant

Single tenant is for customers who must keep tooling and data within their own environments, and where shared services cannot be used. Customers can leverage the benefits of AI within OpenText services, while also having peace of mind that the use of the technology and the security of their data is confined within spaces that are only accessible to them. This also allows customers to parametrize and configure the AI capabilities for their specific needs.

With both multi-tenant and single tenant, OpenText's AI solutions operate to the same high standards as the rest of our solutions, honoring our commitment to privacy and trust. Our approach not only gives organizations more effective and creative ways to use their information, but also delivers AI-powered expertise to take them far beyond what they could achieve alone.

6. Solve Your Most Complex Problems

The emergence of generative AI and large language models has created a pivot point for our industry, where experimentation and differentiation can truly happen at large. And the ability to embed smart algorithms everywhere is not only possible, but essential in order for organizations to compete and prosper.

At OpenText, we understand data. We create Learning Data out of our customers' data, and find the right algorithms and embeddings that allow our customers to concentrate on overcoming challenges and gaining insight, instead of creating AI science projects.

We deliver useful applied AI to the following areas, where we have a long history of helping customers manage data and information to solve their most complex problems:

- **Content:** We help organizations master modern work through smarter information. We are a [leader in content platforms](#), managing structured and unstructured data at scale and with privacy, and we embed AI solutions for our customers to release their stored knowledge.⁶
- **Business Network:** We unleash information with smarter connections, so organizations can reclaim time and resources. We power some of the [largest business networks in the world](#), and by applying AI, we can analyze and report the status of business transactions, and provide deep visibility into supply chains to support growing ESG requirements.
- **IT Operations Management:** We enable smarter digital operations and empower organizations to control both cost and carbon for a net-zero world. We have a long history of applying AI in optimizing and simplifying management of complex IT systems. We are a [leader in AI Operations](#) and in service management, not least by embedding AI everywhere in our solutions.⁷
- **DevOps and Value Stream Management:** We elevate the developer through smarter DevOps, with a keen awareness of how generative AI will change the way developers work. Improving agility and quality of development is essential, and we are applying AI across the digital value stream to optimize and increase productivity.
- **Cybersecurity:** We simplify the security stack for our customers, and protect valuable and sensitive information. Understanding and reacting to threats in real time is essential. Only by applying AI is this possible, and we have some of the best AI-powered cybersecurity solutions, with comprehensive 24x7x365 monitoring aligned to MITRE ATT&CK tactics, techniques and procedures.
- **Experience:** We deliver the unexpected wow for our customers' customers, partners and employees. We help businesses automate end-to-end customer management, and use AI to build better content and better communications, leveraging LLMs to dramatically improve the productivity of marketing, service and support teams.
- **Foundation:** In addition to providing embedded AI solutions in the above areas, we also deliver foundational tooling that combines general data management, traditional analysis and AI, all delivered from a secure private cloud. This allows our customer to bootstrap effortlessly into the world where extracting knowledge from information happens AI-tomatically.

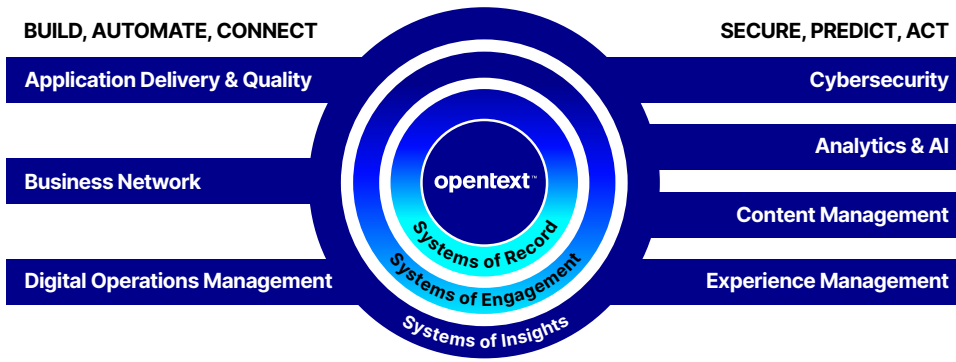


Figure 11:

Smarter with OpenText

7. Content & AI

Large language models are revolutionizing content management and transforming the ways we interact with unstructured content. With their unprecedented ability to comprehend context, extract semantics and knowledge, and automate content management tasks, LLMs are unlocking new value in the content management system.

With OpenText Content Aviator, OpenText Content Cloud is leveraging LLMs to fundamentally improve and transform content management. We will bring these capabilities to all key platforms in the Content Cloud: Core, Documentum and Extended ECM—and create an all-new experience for content users.

OpenText Content Aviator: Key AI Capabilities

The screenshot displays the OpenText Content Aviator interface. At the top, the header reads "Content Aviator" with the OpenText logo. The main content area is divided into three sections:

- Left Panel:** A document preview titled "EXECUTIVE BRIEF" with the sub-heading "OpenText Extended ECM Platform delivers an information advantage to empower business processes". It includes a photo of a man at a desk and several bullet points.
- Center Panel:** A chat window titled "Aviator" with the prompt "Ask me anything on the workspace Extended ECM". It shows a user's request "Summarize this workspace, please." and a response: "The workspace contains documents about OpenText Extended ECM Platform. It is a solution that combines enterprise information management features of OpenText Content Server with business data that is maintained in an enterprise application. A business workspace is a folder in Content Server that contains content, documents, images, videos and so on, which are relevant to a business object."
- Right Panel:** A vertical menu of AI capabilities: Analyze, Summarize, Translate, Search, Navigate, Create, and Automate. To the right of this menu is a graphic of a person climbing a staircase with an upward arrow, accompanied by the text "Mastering Modern Work with AI" and "Elevate User Experience and Efficiency".

At the bottom, there are three logos: "opentext | Core", "opentext | Documentum", and "opentext | Extended ECM".

Figure 12:

OpenText Content Aviator

Content Analysis: Knowledge Extraction, Document Summarization and Translation

Through contextual understanding, LLMs can accurately and comprehensively analyze content, then extract the relevant information from various documents such as contracts or invoices. Additionally, LLMs can summarize individual documents or entire workspaces, with the added capability of translating these summaries into specified target languages, helping users get the important facts faster.

Search: Conversational Search, Semantic Navigation, Related Content and Subject Matter Experts

Empowered by LLMs, chatbots can comprehend user queries, provide relevant information and engage in natural, human-like conversations. By utilizing chat memory to retain conversation history, chatbots can handle follow-up questions effectively. This intuitive interaction with unstructured content reduces cognitive load and enhances the overall user experience. The responses from chatbots will include links to workspaces or individual documents, enabling users to quickly navigate to the precise sources used by LLMs to generate the answers. This allows for semantic navigation independent of traditional folder structures—no more wasted time searching for the right folder or the right document.

In comparison to traditional keyword-based search systems, LLMs possess superior precision in comprehending user queries and delivering relevant search results. By analyzing context, semantics and user preferences, LLMs facilitate seamless access and navigation of unstructured content. Harnessing the power of semantic and similarity search, they can also offer personalized recommendations for related content or subject matter experts.

Create and Act: Content Creation and Content Process Automation

With OpenText Content Aviator, customers will be able to generate new content or documents based on language models and enterprise data sources (including business applications such as SAP or Salesforce). This capability is particularly useful for ideation, customer communication and the creation of business documents. Additionally, users can interact with content management processes, such as approval workflows, in natural language, and the AI system can take appropriate action based on user requests.

Automate Business Configuration

OpenText Content Aviator will streamline the business configuration of OpenText content management platforms, including metadata schemas, workspace templates and workflow maps. Putting these capabilities into the hands of more business users will dramatically accelerate and simplify configuration tasks, as well as eliminate the need for every user to understand complex administration tasks.

AI-Led Code Generation for Developers

LLMs can aid developers by generating code examples to interact with the public APIs provided by OpenText's Private Cloud and Public Cloud services. This simplifies the implementation of integrations or extensions on top of our Content Cloud platforms.

8. Business Network & AI

The world is an internet of clouds—and OpenText is the interconnector. From applications and data to unstructured information and industry ecosystems, OpenText Business Network Cloud connects it all.

The OpenText Cloud and the Internet of Clouds Interconnected and runs over the public internet

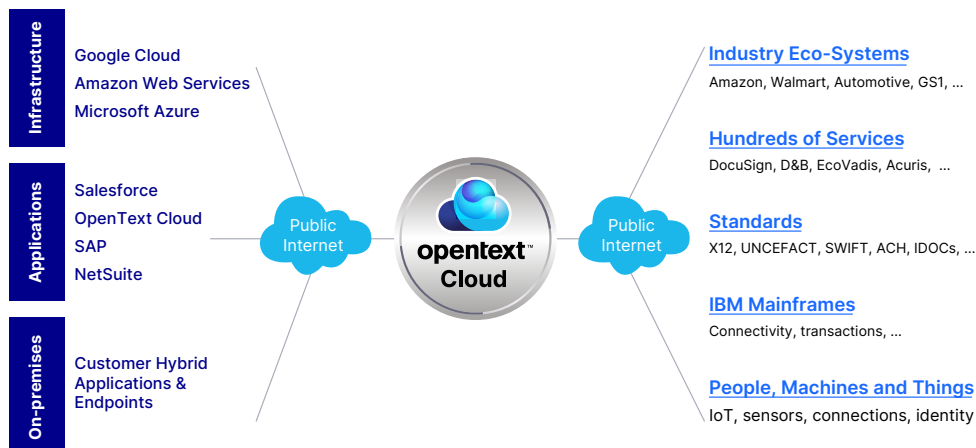


Figure 13:

OpenText interconnects the internet of clouds

OpenText Business Network is leveraging AI and ML to revolutionize how we interact with the internet of clouds and connect with people, systems and things.

OpenText Business Network Aviator: Key AI Capabilities

Address Risk: Identify Anomalies and Patterns in Customer Data

AI enables intelligent agent alerts on a fully indexed data lake of metadata and transactional data. These alerts automatically trigger in response to variances against critical business metrics, such as out-of-threshold invoice amounts, unexpected price changes, trading partner compliance issues, transaction errors and changes in supply chain patterns. By continuously monitoring the data, the AI agent proactively identifies anomalies and deviations, providing real-time alerts to end-users without the need for manual reaction. Leveraging techniques like anomaly detection and machine learning, this solution enhances the accuracy and timeliness of alerts, allowing businesses to proactively address risks, seize opportunities and improve operational efficiency.

Enhance Experience for Documentation, Knowledge Base and Self-Service for Business Network Cloud Foundation: AI-Powered Interactions

Users frequently search for information related to product functionality, limitations, detailed specifications, subject matter experts and more.

For example, a user may ask: “How can I set up a report of a particular document type with a specific trading partner that exceeds the size limit by 5,000 bytes?” Prior to AI, such a report would typically have required live assistance to understand the customer’s transactions and configure the report accordingly. Static help documents often lack coverage for specific use cases like this. AI can assist users with complex queries without the presence of a live agent to walk them through it.

Another example could involve a customer asking: “How can I gain access to an API for downloading my transactions?” In seeing this type of query, AI could potentially initiate the sales funnel process.

At the OpenText Trading Grid Online level, all application teams can continue training the AI models, providing widespread reach and delivering a remarkable user experience.

Deep Understanding: AI-Assisted Self-Service Chatbot

An AI chatbot can seamlessly follow customers across all Trading Grid applications, providing personalized assistance and insights. Customers can access a unified profile view that combines transactional data and community information for efficient browsing through the Trading Partner Data Enrichment feature. The Lens Conversational View augments the chatbot with threaded conversations, enabling better understanding of transactional flows and relevant information.

Additionally, the Trading Grid Command Center, powered by AI, offers visibility into key metrics, such as supplier risk and performance. With this AI-driven ecosystem, customers can optimize their interactions, streamline processes and gain valuable insights for enhanced supply chain management such as:

- Has my purchase order been acknowledged?
- How much total spend with a given trading partner?
- Which trading partner has the best order fulfillment track record?

Decision-Making: Active Intelligence based on Validation Flags

OpenText Active Intelligence combines AI capabilities with an AI chatbot agent to enable AI-assisted decision-making. When specific flags or indicators are triggered, the system uses Active Intelligence to automate or predict subsequent processes or tasks. This feature incorporates a ML framework, allowing the system to learn and improve over time. The AI chatbot facilitates intuitive interactions, using natural language processing to understand user queries, provide responses and assist with data exploration.

9. IT Operations & AI

As IT has grown to be a competitive differentiator for modern enterprise business, it has relied heavily on automation and AI to deliver agility and operational excellence. Over the last decade, OpenText IT Ops has led the way in building a scalable operations delivery platform embedding automation and AI across the full IT operations value chain.

Generative AI now opens the possibility to provide massive, widespread improvements in IT's ability to deliver on its key goals: end-user experience (delight), operator productivity (cost) and intelligent automation (operational excellence).

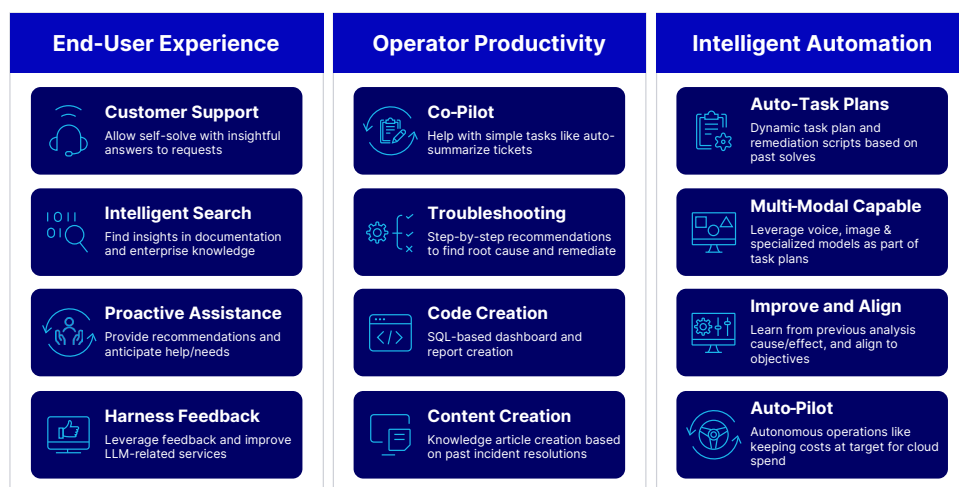


Figure 14:

AI supports critical IT Ops goals

AI is blazing a path to unlock huge benefits, and OpenText IT Operations Aviator looks to harness those capabilities to accelerate growth now and into the far future.

OpenText IT Operations Aviator: Key AI Capabilities

End-User Experience: Virtual Agent and Level-1 Help Desk

Employee productivity will vastly improve as AI reduces disruptions and time spent solving process problems. Imagine an intelligent virtual agent in [OpenText SMAX](#) giving employees accurate instructions to solve everyday problems (e.g. password change, access control, etc.), thus eliminating the need for a Level-1 help desk.

Operator Productivity: Intelligent Search, Content Summaries and Recommendations

Level 2/3 operators will now have the superpower of intelligent search and knowledge at their fingertips, providing ticket summaries and recommending solutions to reduce mean time to repair (MTTR). With hundreds of agents and operators spread across multiple infrastructure and app monitoring help desks, this can dramatically improve efficiency and reduce cost.

Intelligent Automation: Script Generation

Our most sophisticated customers have spent substantial time creating a slew of automation scripts and troubleshooting pathways to solve frequent problems quickly. With the learning abilities of generative AI, we can soon create automation scripts using natural language, making organizations more productive.

10. DevOps & AI

Integrating AI into DevOps presents a unique opportunity to impact and enhance all aspects of software delivery, drive innovation and prioritize quality-centric development. By leveraging AI capabilities, customers can achieve an order of magnitude increase in velocity and dev productivity while ensuring top-notch quality, security and compliance.

With OpenText DevOps Cloud, AI-powered DevOps is the next evolution in enterprise software delivery.

OpenText DevOps Aviator: Key AI Capabilities

Strong AI Foundation: Existing Capabilities Support AI

We have a strong foundation for integrating AI into our platform, with existing capabilities like actionable insights into digital value stream KPIs (including cycle time, release velocity, sprint progress and predictive delivery dates). Additional features include the ability to identify bottlenecks and waste, provide strategic decision support with what-if scenario analysis, apply risk mitigation, and leverage a combination of NLP and computer vision for robust test resiliency and automation.

With a comprehensive end-to-end planning-to-delivery coverage and context-based data harmonization, OpenText DevOps is uniquely positioned to deliver accurate and high-quality outcomes with AI.

Transforming Agile Planning and Delivery: AI Software Planning, Codeless Test Automation and Chatbots

Some exciting near-term future use cases include AI-driven software planning, agile delivery, codeless test automation and intelligent guidance through user-friendly chat interfaces to provide stakeholders with access to powerful insights on project status, bottleneck analysis, quality observations and release predictions. With 69% of IT leaders saying that the lack of real-time insights hinders software development, AI is poised to make a dramatic difference.⁸

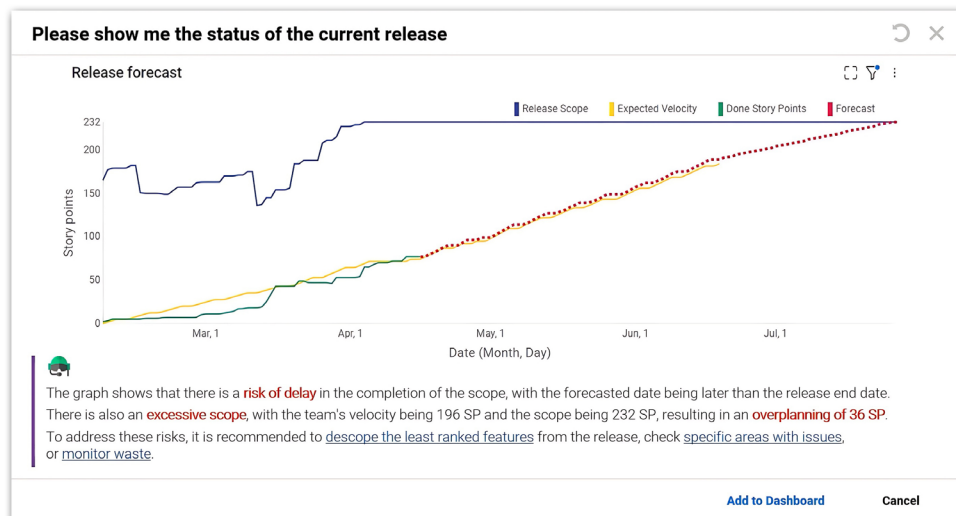


Figure 15:

AI forecasting project completion and identifying risk areas

Quality Assurance: Smart Testing and Governance

AI-infused smart testing will improve efficiency, save time, and deliver higher quality. OpenText envisions an “army” of AI QA agents driving the entire quality planning, test development and automation process.

We are particularly focused on addressing the governance of generative AI output, as automatically-generated assets become more prevalent. This presents challenges in testing new interfaces such as chat and voice, as well as validating the accuracy of AI-generated content. Our commitment to quality and testing will ensure compliance and the expected level of quality in a world where software is written by AI.

Application Delivery: Generative AI for Software Assets Aligned with Business Constraints

We see opportunities in enterprise-grade application delivery optimized by AI. The next generation of code “co-pilots” will address enterprise requirements by incorporating business regulations, cost envelopes and standards into generative AI models. This approach offers numerous benefits, including ensuring compliance, maximizing resource utilization and optimizing cost. It also enables the production of mockups, wireframes, functional code, testing assets and infrastructure blueprints aligned with business requirements and budget constraints.

11. Cybersecurity & AI

Cybersecurity is an arms race, and the latest accelerant is AI. Adversaries are using LLMs to expedite the development of polymorphic malware, craft personalized phishing attacks and find vulnerabilities in source code at scale. The volume of data produced by machines far exceeds that produced by humans—yet organizations must be able to analyze it if they want to survive.

Attackers have substantial resources at their disposal, but intelligent, integrated security solutions provide a formidable defense, especially when deployed broadly across an organization. Precise, efficient and accurate AI is critical to this strategy. The sophistication of attackers has moved the bar far higher than simple statistics and heuristics; no company can survive without being on the cutting edge of AI.

With our long history of innovation and cybersecurity experience, OpenText is uniquely positioned to embed AI into our security solutions and deliver the next generation of defense to our customers.

OpenText Cybersecurity Aviator: Key AI Capabilities

Real-Time Threat Detection: AI-Powered Security

Every month, OpenText processes more than 100 billion real-time decisions from our AI-powered APIs at the heart of our cloud-based defense network. This system leverages our multi-petabyte data lake of historical threat intelligence, against which event data from millions of sources is evaluated, correlated and modeled.

With AI-enabled intelligence, our system can connect the dots from disparate events and see a complete perspective of an attack, due to the breadth and scope of our solutions. For example, knowledge gleaned analyzing a suspicious packet sent to a consumer user's laptop in Brazil immediately protects a mission-critical large enterprise server in Ireland, all because we are able to categorize the content instantly and accurately as it is received.

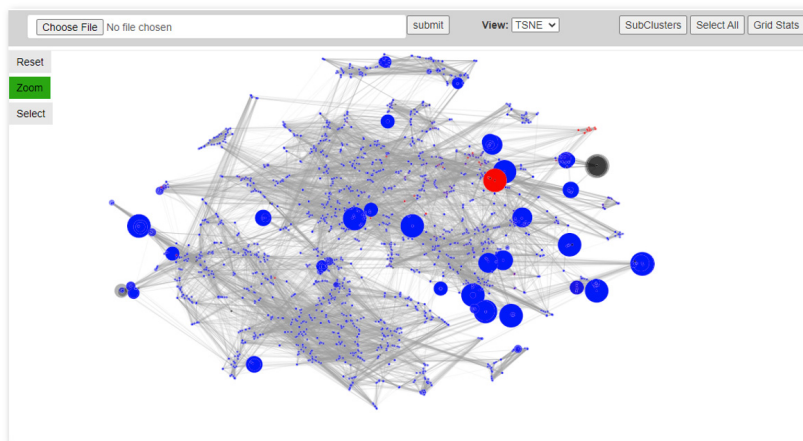


Figure 16:

AI classifier module finding relationships between threats

It is through this intelligent system that we are able to stop countless attacks worldwide every day. Individual layers and point products are not sufficiently effective. The best defense is a wide lens integrated across solutions, powered by bespoke AI models, embedded and enriched at every layer, and constantly evolving to stay ahead of attackers.

12. Experience & AI

Organizations are constantly seeking to deliver exceptional experiences to their customers. And customers are demanding it. In fact, 88% of customers say the experience a company provides is *as important as* its product or services (up from 80% in 2020) and 73% say they expect companies to understand their unique needs and expectations (up from 66% in 2020).⁹

AI is a powerful tool in this endeavor, offering tremendous potential for transforming digital experiences. By leveraging emerging AI capabilities, organizations can enhance customer satisfaction, improve efficiency and drive growth.

The OpenText Experience Cloud already harnesses the power of AI, enabling organizations to personalize content, streamline processes and deliver exceptional user experiences. With the latest advances in LLMs and generative AI, we are further elevating these digital experiences.

OpenText Experience Aviator: Key AI Capabilities

Intelligent Content Creation: AI-Assisted Authoring

Content creation is a time-consuming process, but AI can streamline and optimize it. OpenText currently provides AI-Assisted Authoring in Exstream and TeamSite to help content authors improve readability. AI recommends language that will appeal to a particular audience and searches for images from our Digital Asset Management to complement a communications campaign.

With the upcoming addition of AI-generated content, businesses will be able to increase their content production capacity, maintain consistency, and deliver relevant, fresh and engaging communications to their targeted audiences, which enhances the overall digital experience.

Figure 17:

Experience Aviator generating a customer welcome letter

The screenshot displays a user interface for generating automated text. At the top, a header reads "Generate intelligent automated text". Below this, a section titled "Describe what you would like to create" contains a text input field with the placeholder text "Write welcome letter for a new investment services customer". A "Generate" button is positioned below the input field. Underneath, a section titled "Your generated text" shows the output: "Dear [NewCustomerName], I am writing to welcome you to [CompanyName]! We are so excited to have you as a new customer and look forward to helping you achieve your financial goals. We are confident that you will be happy with our services. We are committed to providing our customers with the highest level of service and support. Thank you for choosing [CompanyName]. We look forward to working with you! Sincerely, [AgentName]". At the bottom of the interface, there are "Cancel" and "Insert" buttons.

Governance of generated content has become a particular challenge, as there are many unknowns and risks related to the IP status of such content. In some cases, information created through generative AI technology cannot be copyrighted, which brings many challenges for global brands and enterprises. Experience Management solutions (CCM, CMS, DAM) can provide transparency regarding the provenance of all created content and assist in automating how such content is processed and used.

Enhance Personalization and Recommendations: Predictive Analytics

By leveraging predictive analytics, organizations can anticipate customer behavior, identify key indicators of successful versus unsuccessful customer journeys, and analyze market trends and demand patterns. These insights allow businesses to optimize their digital experiences by aligning themselves with customer expectations. Historical data collected through the OpenText Experience Cloud enables patterns and trends to be identified which, in turn, can be used to continuously improve individual digital experiences. This starts with building highly personalized customer and user profiles ([OpenText Experience CDP](#)), which, when combined with actionable insights (sentiment, behavior, emergent journey patterns and preferences, intent, etc.), will become the foundation for automated conversational experiences.

This derived knowledge also enables organizations to automatically create highly personalized communications which can be generated and delivered through OpenText Experience Cloud (Exstream, TeamSite, Notifications, Qfiniti, etc.).

Elevate Customer Service Interactions: Chatbots and Virtual Assistants

AI-powered chatbots and virtual assistants have revolutionized customer service interactions. These intelligent systems employ natural language processing and machine learning to understand and respond to customer queries in real time. Improvements in LLM-driven AI will enable chatbots to learn from customer interactions, improving their capabilities over time and delivering increasingly personalized, immersive and intuitive digital experiences.

In fact, the human interactions of the Contact Center represent the ultimate learning data set for how to recognize individual customer challenges, as well as conditions that lead to successful (or unsuccessful) outcomes. This learning data is essential to creating optimal prompts for LLM technologies that can bring faster resolutions for customers and increased lifetime value for businesses.

13. IoT & AI

Technology is getting smaller. The cost of an RFID tag is approaching a penny. Everything will have a tag, and these tags or sensors are becoming more and more sophisticated—not just tracking location, but also reporting on other types of data including temperature, pressure, vibration, acceleration and more. Wearables, manufacturing parts, medical devices, industrial components, and even groceries will be tagged and tracked.

We are on the verge of an IoT explosion, which will be measured not in the millions or billions, but trillions. Each piece of data, generated from this enormity of IoT sensors, will feed into AI that will turn it into insights in real time.

OpenText IoT Cloud is a new solution that will enable our customers to take advantage of the synergies of IoT and AI working together to produce unparalleled insights and capabilities.

Introducing OpenText IoT Cloud

Our top priority for OpenText IoT Cloud is to provide a solution that helps our customers reduce cost and drive new revenue. It will offer full IoT service underpinned by AI, including communication, asset tracking and monitoring, an event engine, process automation, security, machine learning, analytics and more.

With our wide expertise and deep knowledge, we are building OpenText IoT Cloud to simplify the dense ecosystem of options and shrink our customers’ time to value. Customers will be able to build upon their existing OpenText technology to achieve an integrated IoT experience.

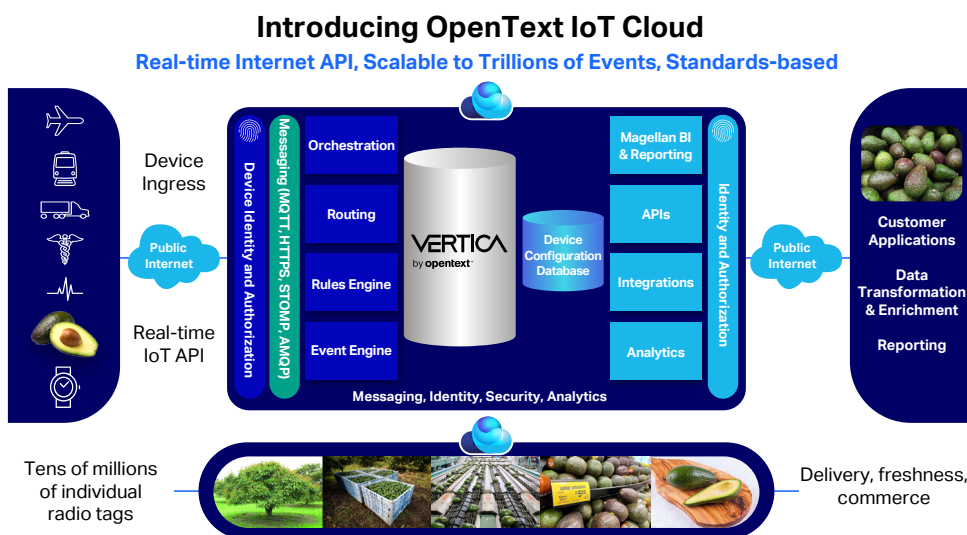


Figure 18:

OpenText IoT Cloud, tracking individual avocados in real time

IoT Cloud can ingest sensor data from any internet protocol (MQTT, HTTP, FTP and more). Once it has that data, it runs sophisticated security and authorization checks. Then it applies a powerful set of tools to the data, compares the data against predefined rules and parameters, and triggers notifications and alerts based on the results of those comparisons. It then routes that data to other applications and data sources.

For example, in the case of produce, IoT Cloud can track fruit from farm to table. It pulls sensor data to determine when produce left the farm, calculates the best route for delivery based on newsfeeds and traffic reports, and reveals how much fruit was lost en route, triggering the business to investigate to prevent future losses, as well as discovering how much produce arrived to its location and how much was sold.

Data is stored in OpenText's Vertica analytical database and tied to our business intelligence tools, so that organizations get real-time insights on their data. We also deliver in-database machine learning, to enable predictive maintenance, anomaly detection and other cases. And we provide a powerful set of APIs. Customers can actually tie into our IoT Cloud platform and build their own applications on top of it.

Available as SaaS and defined APIs, OpenText IoT cloud will empower businesses to quickly assess operational performance and transform data into easy-to-understand information that drives better decision-making.

14. OpenText's AI Foundation

Information is everywhere. An organization might have years of data in its structured databases and millions of documents in its content management systems. On top of that, it could also have massive amounts of information in collaboration tools, smart devices, sensors, chat and video calls.

Data is an organization's most strategic asset, and opentext.ai can help businesses get the most out of it. Our foundational AI tooling in [Magellan](#), [IDOL](#) and [Vertica](#) delivers advanced data access and analytics to help organizations gain the insight they need to make better decisions and work smarter.

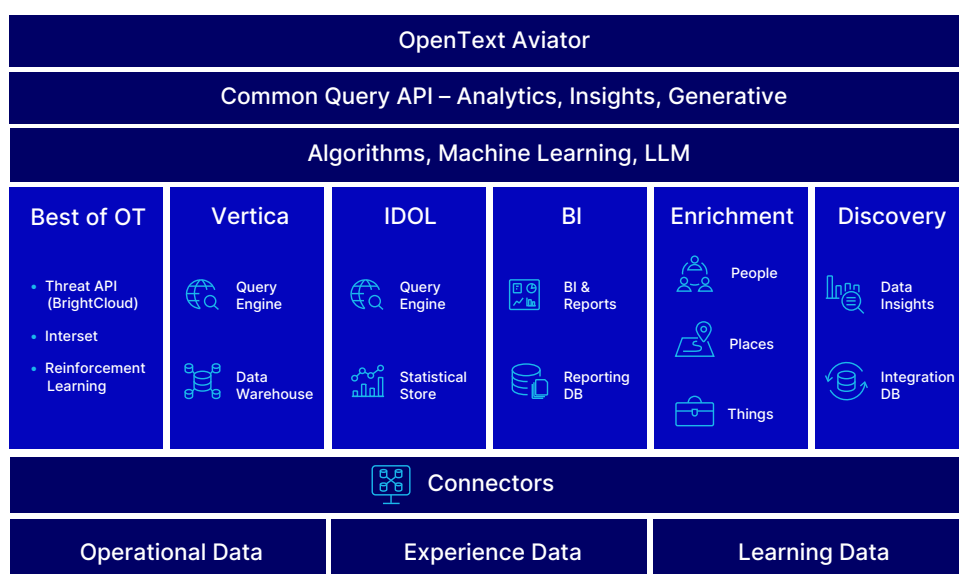


Figure 19:

Foundations of opentext.ai

Get Full Data Access & Analysis

By leveraging AI across the enterprise, organizations can unlock all of their information and analyze data from any source, in any format, using OpenText's extensive capabilities:

- **IDOL KeyView:** Crack open any document and extract text and metadata from a variety of file formats on many platforms. KeyView can automatically recognize data in 1,500 document types.
- **APIs:** Pass in data from every collaboration platform and treat messages and chat as first-class citizens in your pursuit of the information advantage.
- **IDOL Education:** Solve compliance issues by identifying PII from every country, using advanced semantics.
- **Magellan Risk Guard:** Gain ongoing oversight of your content by building a dashboard of risk, and identifying inappropriate language and tone using highly tuned classifiers and advanced NLP.
- **Magellan Text Mining:** Enrich and classify your data with composite AI rules that you can use out of the box or tune yourself.
- **IDOL Media Server:** Extract information locked up in audio and video files, deploying advanced machine learning to further identify objects in your media collection, saving hours of precious time.

Go Deeper

Surfacing your information is just the beginning. Get modern, end-to-end analytics for both structured and unstructured data.

- **Magellan Data Discovery:** Unlock hidden answers in your structured data and apply ML algorithms to gain insights. Perform rapid transformations of your structured data feeds and visually identify patterns, merging many data sets into one.
- **IDOL Find:** Index your information and make it discoverable through the best search platform in the world. In the near future, turn to IDOL for creating embeddings of your content. Vector searching will give your enterprise a power-up button, enabling you to find and action similar content.

Using tuned and enterprise-safe LLMs with IDOL Find will power new applications like automated attendants, research and chat discovery. IDOL Find matches your access control and permissions, so you can securely offer the best of traditional search, knowledge graphs, vectors and LLMs.

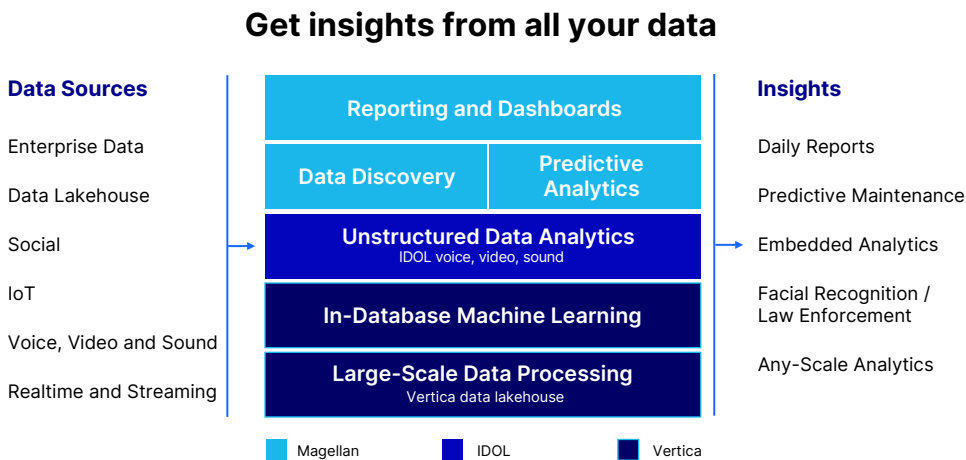


Figure 20:

Get insights from all your data with OpenText Magellan, IDOL and Vertica

Scale Up

You no longer have to struggle with machine-scale problems. Get business value from machine learning faster and more easily.

- **OpenText IoT:** Centralize all of your sensor data, and combine analytics with AI and ML to transform data into easy-to-understand visual information.
- **Vertica:** Comfortably scale to trillions of records a day, easily tackling the most demanding structured data loads. It doesn't matter if your data is ultra-wide or enormous in record count—Vertica can tame it. Vertica's integration with common data formats, such as Iceberg, means you have the power to upgrade your data lake to new structured data insights.
- **Vertica Compliance (coming soon!):** Bring your semi-structured data to Vertica and use forthcoming Vertica Compliance to harness the power of content analytics to identify risk and patterns in your structured data.
- **VerticaPy:** Bring machine learning across all of your data and carry out your analytics directly in the database. No need to spend costly time moving your data into data science platforms.

- **Magellan Business Intelligence and Reporting:** Share visual insights from your biggest data repositories.
- **APIs:** For custom or specialized applications, leverage the OpenText suite of APIs across these solutions to power new applications for your enterprise.

AI foundational solutions from OpenText surface enterprise information, giving organizations the power to organize, analyze and visualize. Businesses get the strategic insights they need to make every decision data-driven, and predict and act on vital opportunities.

15. In Summary

“Any sufficiently advanced technology is indistinguishable from magic.”

-Arthur C. Clarke

It is truly a gift to be living during the dawn of the Cognitive Era.

At the same time, change can feel uncomfortable and challenging. We must lean in and learn. The future is going to be human + AI.

OpenText is embracing AI wholeheartedly. We are integrating and embedding it into the major aspects of our solutions, creating cognitive systems that will redefine our own and our customers' relationship with technology.

Information management is foundational to AI and we are expanding our mission again with opentext.ai, Aviator, IDOL, Vertica and IoT. Each of our business clouds, over time, will support automation, transactions, graphical user interfaces, and now, AI tools and conversational UIs.

Our goal is to be your trusted partner on your AI journey.

The next few years will transform OpenText. The Cognitive Era will change the way machines, people and organizations use and experience information to work and collaborate, how supply chains are created and managed, how individuals experience and trust information, and how we can truly deliver on the promise of technology.

At OpenText, we see a future where every company and every individual can use information to become their best and elevate beyond what they previously thought possible.

With AI, everything must change.

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Endnotes

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